

where

A is an alkanediyl radical of the formula

$-\text{CH}_2-\text{CH}_2-$  (= ethane-1,2-diyl),

$-\text{CH}_2-\text{CH}(\text{CH}_3)-$  (= propane-1,2-diyl) or

$-(\text{CH}_2)_4-$  (= butane-1,4-diyl),

$\text{X}_a$  is  $-\text{O}-$  or  $-\text{NH}-$ ,

$\text{E}_a$  is H,  $(\text{C}_2-\text{C}_8)$ alkanoyl, benzoyl or phenylacetyl,

$\text{CO}-\text{N}([\text{CH}_2]_{x-1}-\text{CH}_3)-\text{CO}-\text{C}_1-\text{C}_4\text{alkyl}$ ,

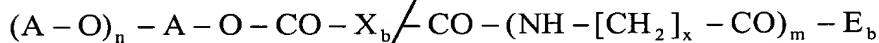
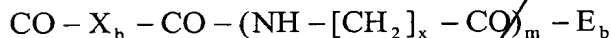
$\text{CO}-\text{N}([\text{CH}_2]_{x-1}-\text{CH}_3)-\text{CO}-\text{C}_6\text{H}_5$  or

$\text{CO}-\text{N}([\text{CH}_2]_{x-1}-\text{CH}_3)-\text{CO}-\text{CH}_2-\text{C}_6\text{H}_5$ ,

x is an integer from 5 to 11,

m is an integer from 30 to 200 and

n is an integer from 4 to 60;



(II)

where

$\text{X}_b$  is an alkanediyl radical of the formula  $-\text{[CH}_2\text{]}_z-$ ,

where z is an integer from 4 to 10,

*meta*- or *para*-phenylene,

$-\text{NH}-\text{C}_1-\text{C}_6\text{alkyl}-\text{NH}-$ ,

$-\text{NH}-\text{C}_6\text{H}_3-(\text{CH}_3)-\text{NH}-$ ,

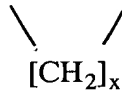
$>\text{N}-[\text{CH}_2]_{x-1}-\text{CH}_3$ ,  $-\text{[CH}_2\text{]}_z-\text{CO}-\text{N}([\text{CH}_2]_{x-1}-\text{CH}_3)-$  or

$-\text{C}_6\text{H}_4-\text{CO}-\text{N}([\text{CH}_2]_{x-1}-\text{CH}_3)-$ ,

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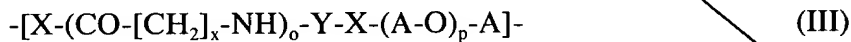
where  $C_6H_4$  is *meta*- or *para*-phenylene,

E<sub>b</sub> is -OH, -O-(C<sub>1</sub>-C<sub>7</sub>)alkyl, -O-phenyl or -N—C=O



. and

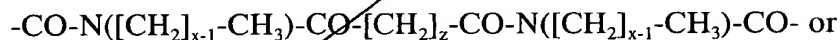
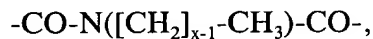
A, m and n have the meanings given above;



where

Y is  $-\text{CO}-$ ,  $-\text{CO}-[\text{CH}_2]_z-\text{CO}-$  or  $-\text{CO}-\text{C}_6\text{H}_4-\text{CO}-$ ,

where  $C_6H_4$  is *meta*- or *para*-phenylene, or is



where  $C_6H_4$  has the meanings specified,

o is an integer from 10 to 150 and

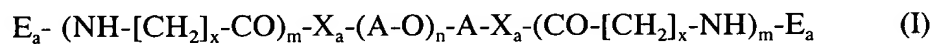
p is an integer from 4 to 100 and

A, x and z have the meanings given above.

Please add the following new claims:

12. (New) A process for producing a biaxially stretched and thermoset, tubular, seamless, single-layer or a biaxially stretched and thermoset, tubular, seamless, multiple-layer food casing having a residual shrinkage in the range of from 5 to 20% at 80°C, in which the layer or, in the case of multiple-layer casings, at least one of the layers comprises a block copolymer containing "hard" aliphatic polyamide blocks having a glass-transition temperature of from 20 to 80°C and "soft" aliphatic polyether blocks having a

glass-transition temperature of from -100 to -20°C, which block copolymer corresponds to one of the formulae I to III



where

A is an alkanediyl radical of the formula

-CH<sub>2</sub>-CH<sub>2</sub>- (= ethane-1,2-diyl),

-CH<sub>2</sub>-CH(CH<sub>3</sub>)- (= propane-1,2-diyl) or

-(CH<sub>2</sub>)<sub>4</sub>- (= butane-1,4-diyl),

X<sub>a</sub> is -O- or -NH-,

E<sub>a</sub> is H, (C<sub>2</sub>-C<sub>8</sub>)alkanoyl, benzoyl or phenylacetyl,

CO-N([CH<sub>2</sub>]<sub>x-1</sub>-CH<sub>3</sub>)-CO-(C<sub>1</sub>-C<sub>4</sub>)alkyl,

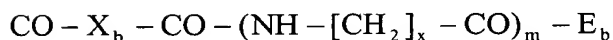
CO-N([CH<sub>2</sub>]<sub>x-1</sub>-CH<sub>3</sub>)-CO-C<sub>6</sub>H<sub>5</sub> or

CO-N([CH<sub>2</sub>]<sub>x-1</sub>-CH<sub>3</sub>)-CO-CH<sub>2</sub>-C<sub>6</sub>H<sub>5</sub>,

x is an integer from 5 to 11,

m is an integer from 30 to 200 and

n is an integer from 4 to 60;



(II)



where

X<sub>b</sub> is an alkanediyl radical of the formula -[CH<sub>2</sub>]<sub>z</sub>-,

where z is an integer from 4 to 10,

*meta*- or *para*-phenylene,

-NH-(C<sub>1</sub>-C<sub>6</sub>)alkyl-NH-,

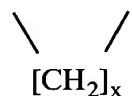
-NH-C<sub>6</sub>H<sub>3</sub>-(CH<sub>3</sub>)-NH-,

> N-[CH<sub>2</sub>]<sub>x-1</sub>-CH<sub>3</sub>, -[CH<sub>2</sub>]<sub>z</sub>-CO-N([CH<sub>2</sub>]<sub>x-1</sub>-CH<sub>3</sub>)- or

-C<sub>6</sub>H<sub>4</sub>-CO-N([CH<sub>2</sub>]<sub>x-1</sub>-CH<sub>3</sub>)-,

where C<sub>6</sub>H<sub>4</sub> is *meta*- or *para*-phenylene,

E<sub>b</sub> is -OH, -O-(C<sub>1</sub>-C<sub>7</sub>)alkyl, -O-phenyl or -N—C=O



and

A, m and n have the meanings given above;

-[X-(CO-[CH<sub>2</sub>]<sub>x</sub>-NH)<sub>o</sub>-Y-X-(A-O)<sub>p</sub>-A]- (III)

where

Y is -CO-, -CO-[CH<sub>2</sub>]<sub>z</sub>-CO- or -CO-C<sub>6</sub>H<sub>4</sub>-CO-,

where C<sub>6</sub>H<sub>4</sub> is *meta*- or *para*-phenylene, or is

-CO-N([CH<sub>2</sub>]<sub>x-1</sub>-CH<sub>3</sub>)-CO-,

-CO-N([CH<sub>2</sub>]<sub>x-1</sub>-CH<sub>3</sub>)-CO-[CH<sub>2</sub>]<sub>z</sub>-CO-N([CH<sub>2</sub>]<sub>x-1</sub>-CH<sub>3</sub>)-CO- or

-CO-N([CH<sub>2</sub>]<sub>x-1</sub>-CH<sub>3</sub>)-CO-C<sub>6</sub>H<sub>4</sub>-CO-N([CH<sub>2</sub>]<sub>x-1</sub>-CH<sub>3</sub>)-CO-,

where C<sub>6</sub>H<sub>4</sub> has the meanings specified,

o is an integer from 10 to 150 and

p is an integer from 4 to 100 and

A, x and z have the meanings given above, wherein said process comprises:

preparing a homogeneous melt of a polymer blend containing the block copolymer;

extruding the melt through a heated ring die to form a seamless tube;

stretching the extruded casing by blow molding to form a stretched tube;

partially thermosetting the stretched tube to form the single or multilayer food casing.

13. (New) A process according to claim 12, further comprising rapidly cooling the seamless tube after extrusion to obtain the polymers in an amorphous state, and heating the cooled tube to a blow molding temperature.

14. (New) A process according to claim 12, wherein the step of extruding the melt through a heated ring die to obtain a seamless tube, further comprises coextruding the polymer blend and another polymer blend through a coextrusion die to obtain a multilayer seamless tube.